

## **CLAIMS**

1. Method of manufacturing a gliding board (10), characterized in that it comprises the following distinct steps, which involve:
  - manufacturing a foam preform (23) of a core (24);
  - proceeding with step for shaping the core (24) by thermoforming the foam preform (23) with material compression;
  - covering the core (24) with an outer skin (26).
2. Methods according to claim 1, characterized in that the foam of the core (24) is a rigid foam.
3. Method according to one of claims 1 or 2, characterized in that the foam of the core (24) is a thermoplastic foam.
4. Method according to any of the previous claims, characterized in that the shaping step by thermoforming the core with material compression induces areas of various densities in the core (24).
5. Method according to claim 4, characterized in that the shaping step by thermoforming the core with material compression induces in the core, areas with a density that differs from the initial density of the foam by at least 20 percent.
6. Method according to any of claims 4 or 5, characterized in that the shaping step by material compression thermoforming a peripheral area with a higher density induces in the core (24).
7. Method according to any of claims 4 to 6, characterized in that the shaping step by material compression thermoforming induces in the core an area with a higher density in an area corresponding to a surface for supporting the user's feet.

8. Method according to any of the previous claims, characterized in that the shaping step by material compression thermoforming preserves areas in which the foam is not subject to compression.

9. Method according to any of the previous claims, characterized in that the shaping step by material compression thermoforming induces in the core a first area and a second area, the second area being both thicker and denser than the first.

10. Method according to any of the previous claims, characterized in that the shaping step by material compression thermoforming allows forming in the core (24) a housing (50) for an insert (48).

11. Method according to any of the previous claims, characterized in that the insert is used as a thermoforming tool allowing to form the housing.

12. Gliding board comprising at least a foam core (24) covered with an outer skin (26), characterized in that the foam core (24) has at least one first area and one second area, the second area being both thicker and denser than the first, without material discontinuity between said zones.

13. Gliding board comprising at least one foam core (24), characterized in that the core is obtained by a method comprising a step of material compression thermoforming according to any of claims 1 to 11.